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Exhibit R-2, RDT&E Budget Item Justification										Date: Feb 2000	
APPROPRIATION/BUDGET ACTIVITY RDT&E,N - BA7						Program Element Name & No. PE 0101221N, Strategic Sub & Weapons System Support					

Cost (\$ in Millions)		FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	Cost to Complete	Total Cost
Total PE Cost		51.7	59.6	42.7	43.6	37.0	38.3	45.2	CONT.	CONT.
J0951 TRIDENT II		9.7	9.0	9.6	9.7	1.5	1.5	1.6	CONT	CONT
S0004 TRIDENT Submarine System Improvement		6.2	2.2	.6	.6	1.5	1.9	7.8	CONT	CONT
J2228 Technology Applications Program		35.8	48.4	32.5	33.3	34.0	34.9	35.8	CONT	CONT
RDT&E Articles Qty										

A. (U) Mission Description and Budget Item Justification:
The TRIDENT II (D5) Submarine Launched Ballistic Missile (SLBM) provides the U.S. a weapon system with greater accuracy and payload capability as compared to the TRIDENT I (C4) system. TRIDENT II enhances U.S. strategic deterrence providing a survivable sea-based system capable of engaging the full spectrum of potential targets with fewer submarines. This PE supports continued evaluation of the system's long range performance and capabilities as well as investigations into new technologies which would help mitigate the program impact due to component obsolescence and a rapidly decreasing manufacturing support base. Efforts also include Reentry System and Guidance System Applications efforts. The TRIDENT Submarine System Improvement Program develops and integrates command and control Improvements needed to maintain TRIDENT Submarine operational capability through the life cycle of this vital strategic asset. The program conducts efforts needed to maintain strategic connectivity, ensure platform invulnerability, and reduce lifecycle costs through Obsolete Equipment Replacement (OER) and commonality.

(U) JUSTIFICATION FOR BUDGET ACTIVITY:
This program is funded under OPERATIONAL SYSTEMS DEVELOPMENT because it encompasses engineering and manufacturing development for operational systems.

UNCLASSIFIED

UNCLASSIFIED

B. (U) Program Change Summary:			
	FY1999	FY 2000	FY 2001
FY 2000 President's Budget:	56.5	45.9	45.3
Adjustments from FY 2000 President's Budget to Appropriated Value			
0	13.7	0	
Appropriated Value:	56.5	59.6	N/A
Adjustments to FY 1999 Appropriated value & FY 2000 President's Budget			
-4.8	0	-2.6	
FY 2001 President's Budget Submit:			
	51.7	59.6	42.7
<p>Explanation: Changes from FY 2000 President's Budget to FY 2000 Appropriated In FY 2000 project J2228 was granted a Congressional plus up of +\$14.0 for RADHARD electronics work in the Guidance Applications effort, which was partially offset by a -\$.3 across the board reduction. Also, \$1.028 of the extramural program is reserved for the SBIR assessment IAW 15 USC 638.</p> <p>FY 2001 President's Budget changes: For all projects in FY 1999 there are SBIR assessments of -\$1.1. For project S0004 in FY 1999 there were reductions of -\$1.1 for a combination of Congressional revised economic assumptions, midyear review BTR civilian personnel underexecution adjustments, and other miscellaneous adjustments. For project J2228 in FY 1999 there was a Below Threshold sponsor generated Reprogramming of -\$1.9, inflation savings of -.3, and a transfer out of -.3 to finance 1% closed account billings. Project J0951 also had a transfer out in FY 1999 of -.1 for closed account billings. In FY 2001, Project J2228 was reduced by -\$3.0 for affordability reasons in the area of Technology Applications, -.2 for inflation, and Project S0004 was increased \$0.6 for Architecture Model Maintenance.</p>			
C. (U) Other Program Funding Summary: See enclosed R-2a for each individual project data.			
D. (U) Acquisition Strategy: See enclosed R-2a for each individual project data.			
E. (U) Schedule Profile: Not Applicable.			

UNCLASSIFIED

Exhibit R-2a, RDT&E Project Justification			Date: Feb 2000
APPROPRIATION/BUDGET ACTIVITY RDT&E,N - BA7	Program Element Name & No. PE 0101221N, Strategic Sub & Weapons System Support	Project Name and Number. TRIDENT II - Jo951	

Cost (\$ in Millions)		FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	Cost to Complete	Total Cost
Project Cost J0951 TRIDENT II		9.7	9.0	9.6	9.7	1.5	1.5	1.6	CONT.	CONT.
RDT&E Articles Qty										

A. (U) Mission Description and Budget Item Justification:

The TRIDENT II (D5) Submarine Launched Ballistic Missile (SLBM) provides the U.S. a weapon system with greater accuracy and payload capability as compared to the TRIDENT I (C4) system. TRIDENT II enhances U.S. strategic deterrence by providing a survivable sea-based system capable of engaging the full spectrum of potential targets with fewer submarines. This project supports continued evaluation of the system's long range performance and capabilities as well as investigations into new technologies which would help mitigate the program impact due to component obsolescence and a rapidly decreasing manufacturing support base.

(U)PROGRAM ACCOMPLISHMENTS AND PLANS:

R-1 Item No 157 - 3 of 157 - 18

Exhibit R-2a RDT&E Project Justification
(Exhibit R-2a)

UNCLASSIFIED

UNCLASSIFIED

Exhibit R-2a, RDT&E Project Justification		Date: Feb 2000
APPROPRIATION/BUDGET ACTIVITY RDT&E,N - BA7	Program Element Name & No. PE 0101221N, Strategic Sub & Weapons System Support	Project Name and Number. TRIDENT II - Jo951

1. (U) FY 1999 Accomplishments:

- (U) (\$9.3) SRS: Effort continued in support of phase three development of the SLBM Retargeting System. Full obligation has been achieved.
- (U) (\$.4) This represents funding utilized to finance closed account billings. Full obligation has been achieved.

2. (U) FY 2000 PLAN:

- (U) (\$8.2) SRS:. Effort continues in support of phase three development of the SLBM Retargeting System. Full obligation is projected by 3^d quarter of the 1st year.
- (U) (\$.8) This represents funding utilized to finance closed account billings. Full obligation is projected by the end of the fiscal year.

3. (U) FY 2001 PLAN:

- (U) (\$8.7) SRS:. Effort continues in support of phase three development of the SLBM Retargeting System. Full obligation is projected by 3^d quarter of the 1st year.
- (U) (\$.9) This represents funding utilized to finance closed account billings. Full obligation is projected by the end of the fiscal year.

UNCLASSIFIED

UNCLASSIFIED

Exhibit R-2a, RDT&E Project Justification			Date: Feb 2000
APPROPRIATION/BUDGET ACTIVITY RDT&E,N - BA7	Program Element Name & No. PE 0101221N, Strategic Sub & Weapons System Support	Project Name and Number. TRIDENT II - Jo951	

B. (U) Other Program Funding Summary: (Dollars in Thousands)

	<u>FY 1999</u>	<u>FY 2000</u>	<u>FY 2001</u>	<u>FY 2002</u>	<u>FY 2003</u>	<u>FY 2004</u>	<u>FY 2005</u>	<u>To Complete</u>	<u>Total</u>
<u>Programt</u>	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

(U) Related RDT&E: N/A

C. (U) Acquisition Strategy:

Contracts will continue to be awarded to those sources who were engaged in the TRIDENT II (D5) development program and are currently engaged in the production and/or operational support of the deployed D5/C4 Strategic Weapons Systems on the basis of Other Than Full and Open Competition pursuant to the authority of 10 U.S.C. 2304 ©(1) and (3) implemented by FAR 6.302.-1, 3 4.

D. (U) Schedule Profile: Not Applicable.

UNCLASSIFIED

UNCLASSIFIED

Exhibit R-3, Cost Analysis			Date: Feb 2000
APPROPRIATION/BUDGET ACTIVITY RDT&E,N - BA7	Program Element Name & No. PE 0101221N, Strategic Sub & Weapons System Support	Project Name and Number. TRIDENT II - J0951	

Cost Categories	Contract Method & Type	Performing Activity & Location	Total PYs Cost	FY99 Cost	FY99 Award Date	FY00 Cost	FY00 Award Date	FY01 Cost	FY01 Award Date	Cost To Complete	Total Cost	Target Value of Contract
<u>Product Development</u>												
Ancillary Hardware Development	SS / CPFF	GDDS/MA.	25.4	3.0	10/98	3.1	10/99	0	N/A	Cont.	Cont.	Cont.
Ancillary Hardware Development	WR	NSWC/VA.	39.5	6.3	10/98	5.1	10/99	8.7	10/00	Cont.	Cont.	Cont.
Primary Hardware Development	PD	SPBH/D.C.	N/A	.4	10/98	..8	10/99	0.9	10/00	Cont.	Cont.	Cont.
Subtotal Product Development			64.9	9.7		9.0		9.6				
Remarks:												
Total Cost			64.9	9.7		9.0		9.6		CONT.	CONT.	CONT.
Remarks:												

R-1 Item No 157 - 6 of 157 - 18

Exhibit R-3 RDT&E Project Justification
(Exhibit R-3)

UNCLASSIFIED

UNCLASSIFIED

Exhibit R-2a, RDT&E Project Justification			Date: Feb 2000
APPROPRIATION/BUDGET ACTIVITY RDT&E,N - BA7	Program Element Name & No. PE 0101221N, Strategic Sub & Weapons System Support	Project Name and Number. Technology Applications - J2228	

Cost (\$ in Millions)		FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	Cost to Complete	Total Cost
Project Cost J2228 Technology Applications Program		35.8	48.4	32.5	33.3	34.0	34.9	35.8	CONT.	CONT.
RDT&E Articles Qty										

A. (U) Mission Description and Budget Item Justification:

This supports implementation of a coordinated Air Force/Navy Reentry System Applications Program as well as the implementation of a Strategic Guidance Applications Program. Reentry Vehicle and Guidance Technology is rapidly eroding beyond the point of being capable to respond to increasing aging phenomena and future requirements. The Nuclear Posture Review examined the infrastructure which supports the nuclear force structure. It concluded that special actions were required to correct the rapidly eroding capability to maintain confidence in the existing weapon systems, and recommended that the reentry vehicle and guidance technology bases should be preserved. That recommendation resulted in the Presidential Decision Directive-30, which directed that programs be established for the reentry vehicle and guidance technology application.

- Through sustainment of the Reentry Vehicle Technology Base, confidence in the dependability and reliability of Strategic SLBM and ICBM weapon systems will be maintained over the long term when no new systems will be in development. Critical and unique attributes necessary for the design, development and in-service support of current and modernized SLBM Reentry Systems will be defined and maintained to insure a functioning readiness application technical capability in reentry is preserved. Working closely with the Air Force, Navy requirements will be integrated with the Air Force requirements into a comprehensive program. The Program will maintain close coordination with the DOD Science and Technology (S&T) Community through the Reliance process in order to: leverage S&T programs, ensure system driven technology base requirements are considered in contract awards, eliminate duplication of effort and provide an opportunity to demonstrate appropriate emerging technologies through a reentry flight test evaluation process.
- This Program provides a minimum Strategic Guidance core technology development capability consistent with the Strategic Advisory Group (SAG) recommendations to CINCSTRAT. In the SAG recommendations SSP is to establish a program which preserves this critical design and development core. It is a basic bridge program which develops critical guidance technology applicable to any of the existing Air Force/Navy Strategic Missiles. The objective is to transition from current capability to a long term readiness status required to support deployed systems. Air Force and Navy guidance technology requirements shall be integrated and needs prioritized. Efforts shall be focused on alternatives to currently utilized technologies identified as system "weak links". Current system accuracy and functionality depends upon key technologies which provide radiation hardened velocity, attitude and stellar sensing capabilities. As the underlying technologies that currently provide these capabilities age and are no longer technically supportable modern alternatives must be made available in order to allow for orderly replacement. There is no commercial market for these technologies and their viability depends on the Strategic community. This technology

R-1 Item No 157 - 7 of 157 - 18

Exhibit R-2a RDT&E Project Justification
(Exhibit R-2a)

UNCLASSIFIED

UNCLASSIFIED

Exhibit R-2a, RDT&E Project Justification		Date: Feb 2000
APPROPRIATION/BUDGET ACTIVITY RDT&E,N - BA7	Program Element Name & No. PE 0101221N, Strategic Sub & Weapons System Support	Project Name and Number. Technology Applications - J2228

development activity provides the necessary technical challenges which insures the availability of a proficient team of technical experts. The availability and maintenance of these skills and experience of these experts are crucial to the support of the nation's Strategic Guidance Systems.

(U) PROGRAM ACCOMPLISHMENTS AND PLANS:

1. (U) FY 1999 Accomplishments
 - (U) (\$19.7) Continued Reentry System Applications Program. The effort is fully obligated. FY 1999 efforts included:
 - (U) Conducted ground testing of reentry vehicle candidate materials including those available from Science & Technology (S&T).
 - (U) Initiated down-select process of low-cost candidate replacement materials.
 - (U) Initiated procurement and testing of reentry hardware components exposed to operational environments beyond their design life.
 - (U) Maintained RSAP technical program plan, conduct system assessments and identify tools to conduct Vulnerability & Hardening certification in absence of Nuclear Underground Testing (UGT) facilities.
 - (U) Continued development of instrumentation for flight test applications.
 - (U) Demonstrated developed Arming, Fuzing & Firing (AF&F) instrumentation.
 - (U) Initiated feasibility of low-cost replacement candidate for aging Mk4 AF&F.
 - (U) (\$16.1) Continued Strategic Guidance Applications Program. The effort is fully obligated. FY 1999 efforts included:
 - (U) Structural (mechanical and thermal) and system performance was added to Integrated Engineering Environment (IEE) system functionality along with improved fidelity towards a "virtual" system capability in FY 2001. Continued expanding the hardware design support of Strategic Inertial Guidance Hardware Technology Synthesizer (SIGHTS) into other subsystems such as attitude and stellar and their associated hardware correlation. Delivered and began utilization of the "probes" initiated in FY 1997. Completed the prototype alternate PIGA design studies and test towards a Critical Design review. The completion of radiation testing of Interferometric Fiber Optic Gyro (IFOG) technology occurred in early FY 1998. Initiated evaluation of IFOG architecture solutions to radiation issues found in component testing (approximately two-year effort.) Procured alternate stellar sensors to TRIDENT II format. Continued the microprocessor effort.

R-1 Item No 157 - 8 of 157 - 18

Exhibit R-2a RDT&E Project Justification
(Exhibit R-2a)

UNCLASSIFIED

UNCLASSIFIED

Exhibit R-2a, RDT&E Project Justification		Date: Feb 2000
APPROPRIATION/BUDGET ACTIVITY RDT&E,N - BA7	Program Element Name & No. PE 0101221N, Strategic Sub & Weapons System Support	Project Name and Number. Technology Applications - J2228

2. (U) FY 2000 Plan

- (U) (\$19.1) Continue Reentry System Applications Program. Full obligation is projected by the 3rd quarter of the 1st year. FY 2000 efforts include:
 - (U) Continue ground testing of reentry vehicle candidate materials including those available from Science & Technology (S&T).
 - (U) Continue down-select process of low-cost candidate replacement materials.
 - (U) Initiate planning and procurement of required hardware and instrumentation for demonstration of low-cost replacement heatshield.
 - (U) Initiate build-up of heavily instrumented flight unit for aged hardware evaluation.
 - (U) Continue ground testing of reentry components exposed to operational environments beyond their design life, and evaluate FY 1999 ground testing data.
 - (U) Maintain RSAP technical program plan, conduct system assessments and initiate Vulnerability & Hardening certification process in absence of Nuclear Under Ground Testing (UGT) facilities.
 - (U) Evaluate Arming, Fuzing & Firing (AF&F) flight data.
- (U) (\$29.3) Continue Strategic Guidance Applications Programs (GAP). Full obligation is projected by the 3rd quarter of the 1st year. FY 2000 efforts include:
 - (U) Complete and more fully utilize the IEE virtual system capability. Continue with IEE/SIGHTS towards a "real time" hardware-in-loop simulation capability targeted for completion in late FY 2001. Begin to utilize the IEE/SIGHTS capability to perform system architecture/design tradeoffs. Initiate prototype alternate PIGA fabrication and subassembly testing.
 - (U) Continue IFOG work started in FY 1999. Initiate stellar subsystem prototype using English Electric Valve (EEV) or alternate sensor technology.
 - (U) Develop unique integrated circuits (IC) using radiation Hard Technology to be infused into Computer Aided Design tools. These RHTCAD tools will provide the Navy with a capability to replace and develop new RADHARD components as required for strategic missiles and satellites.

R-1 Item No 157 - 9 of 157 - 18

Exhibit R-2a RDT&E Project Justification
(Exhibit R-2a)

UNCLASSIFIED

UNCLASSIFIED

Exhibit R-2a, RDT&E Project Justification		Date: Feb 2000
APPROPRIATION/BUDGET ACTIVITY RDT&E,N - BA7	Program Element Name & No. PE 0101221N, Strategic Sub & Weapons System Support	Project Name and Number. Technology Applications - J2228

3. (U) FY 2001 Plan

- (U) (\$17.9) Continue Reentry System Applications Program. Full obligation is projected by the 3rd quarter of the first year. FY 2001 efforts include:
 - (U) Continue ground testing of reentry vehicle candidate materials including those available from Science & Technology (S&T).
 - (U) Conduct low-cost replacement heatshield demonstration.
 - (U) Continue ground testing of reentry components exposed to operational environments beyond their design life.
 - (U) Evaluate aged hardware flight data.
 - (U) Maintain RSAP technical program plan, conduct system assessments and continue Vulnerability & Hardening certification process in absence of Nuclear Under Ground Testing (UGT) facilities.
- (U) (\$14.6) Continue Strategic Guidance Applications Programs (GAP). Full obligation is projected by the 3rd quarter of the 1st year. FY 2001 efforts include:
 - (U) Complete prototype fabrication and initiate component testing of alternate accelerometer, IFOG and stellar subsystem. Continue evaluation of circumvention alternatives at the system level.

B.(U) Other Program Funding Summary: (Dollars in Thousands)

FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005To	TOTAL
<u>ESTIMATE</u>	<u>ESTIMATE</u>	<u>ESTIMATE</u>	<u>ESTIMATE</u>	<u>ESTIMATE</u>	<u>ESTIMATE</u>	<u>ESTIMATE</u>	<u>COMPLETE</u>
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

(U) Related RDT&E: N/A

UNCLASSIFIED

UNCLASSIFIED

Exhibit R-2a, RDT&E Project Justification		Date: Feb 2000
APPROPRIATION/BUDGET ACTIVITY RDT&E,N - BA7	Program Element Name & No. PE 0101221N, Strategic Sub & Weapons System Support	Project Name and Number. Technology Applications - J2228

C. (U) Acquisition Strategy:

Contracts will continue to be awarded to those sources who were engaged in the TRIDENT II (D5) development program and are currently engaged in the production and/or operational support of the deployed D5/C4 Strategic Weapons Systems on the basis of Other Than Full and Open Competition pursuant to the authority of 10 U.S.C. 2304 (c) (1) and (3) implemented by FAR 6.302.-1, 3 4.

D (U) Schedule Profile: Not Applicable

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Exhibit R-3 Cost Analysis		Date: Feb 2000
APPROPRIATION/BUDGET ACTIVITY RDT&E,N - BA7	PROGRAM ELEMENT NAME AND NUMBER Strategic Submarine & Weapons System Support, PE 0101221N	PROJECT NAME AND NUMBER Technology Applications J2228

Cost Categories	Contract Method & Type	Performing Activity & Location	Total Pys Cost	FY99 Cost	FY99 Award Date	FY00 Cost	FY00 Award Date	FY01 Cost	FY01 Award Date	Cost To Complete	Total Cost	Target Value of Contract
SUPPORT AND MANAGEMENT												
TECHNOLOGY APPLICATIONS	SS - CPFF	LMMS/CAL	16.4	9.1	10/98	9.0	10/99	7.0	10/00	CONT.	CONT.	CONT.
TECHNOLOGY APPLICATIONS	WR	NSWC/VA	12.2	7.2	10/98	5.4	10/99	7.1	10/00	CONT.	CONT.	CONT.
TECHNOLOGY APPLICATIONS	MIPR	DOE/NM	2.1	1.6	10/98	1.9	10/99	1.1	10/00	CONT.	CONT.	CONT.
TECHNOLOGY APPLICATIONS	SS - CPFF	CSDL/MA	0.2	1.2	10/98	2.2	10/99	2.1	10/00	CONT.	CONT.	CONT.
TECHNOLOGY APPLICATIONS	SS - CPFF	KAMAN/CO	1.6	0.6	10/98	0.6	10/99	.6	10/00	CONT.	CONT.	CONT.
TECHNOLOGY APPLICATIONS	SS - CPFF	CSDL/MA	30.1	16.1	10/98	29.3	10/99	14.6	10/00	CONT.	CONT.	CONT.
Subtotal Support			62.6	35.8		48.4		32.5				
Remarks												

R-1 Item No 157 - 12 of 157 - 18

Exhibit R-3 Project Cost Analysis
(Exhibit R-3)

UNCLASSIFIED

CLASSIFICATION:

UNCLASSIFIED

EXHIBIT R-2a, RDT&E Project Justification							DATE: February 2000			
APPROPRIATION/BUDGET ACTIVITY RDT&E, N/BA-7	PROGRAM ELEMENT NAME AND NUMBER Strategic Sub & Wpns Sys Spt 0101221N				PROJECT NAME AND NUMBER TRIDENT Submarine System Improvement/S0004					
COST (\$ in Millions)		FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	Cost to Complete	Total Cost
Project Cost		6.2	2.2	0.6	0.6	1.5	1.9	7.8	CONT.	CONT.
RDT&E Articles Qty										

A. (U) Mission Description and Budget Item Justification:

The TRIDENT Submarine System Improvement Program develops and integrates command and control improvements needed to maintain TRIDENT submarine operations capability through the life cycle of this vital strategic asset. The program conducts efforts needed to maintain strategic connectivity, ensure platform invulnerability, and reduce life cycle costs through Obsolete Equipment Replacement (OER) and commonality.

(U) Program Accomplishments and Plans:

1. (U) FY 1999 Accomplishments:

- (U) (\$3.310) Completed development of TRIDENT CCS MK2 Block 1C DWS Program.
- (U) (\$2.330) Continued development of ARCI Phase I/II MPP Program.
- (U) (\$0.554) Continued Architecture Model Maintenance and COTS Technical Refresher.

R-1 SHOPPING LIST - Item No. 157-13 of 157-18

Exhibit R-2a, RDT&E Project Justification
(Exhibit R-2a)

UNCLASSIFIED

CLASSIFICATION:

UNCLASSIFIED

EXHIBIT R-2a, RDT&E Project Justification						DATE: February 2000																																																						
APPROPRIATION/BUDGET ACTIVITY RDT&E, N/BA-7		PROGRAM ELEMENT NAME AND NUMBER Strategic Sub & Wpns Sys Spt 0101221N			PROJECT NAME AND NUMBER TRIDENT Submarine System Improvement/S0004																																																							
<p>2. (U) FY 2000 Plan:</p> <ul style="list-style-type: none"> - (U) (\$.506) Complete development of ARCI Phase I/II MPP Program. - (U) (\$1.505) Continue Architecture Model Maintenance and COTS Technical Refresher. <p>3. (U) FY 2001 Plan: Not applicable.</p> <table style="width: 100%; margin-top: 20px;"> <thead> <tr> <th></th> <th style="text-align: right;">FY 1999</th> <th style="text-align: right;">FY 2000</th> <th style="text-align: right;">FY 2001</th> </tr> </thead> <tbody> <tr> <td>FY 2000 President's Budget:</td> <td style="text-align: right;">7.414</td> <td style="text-align: right;">2.200</td> <td style="text-align: right;">0.600</td> </tr> <tr> <td>Appropriated Value:</td> <td style="text-align: right;">7.414</td> <td></td> <td></td> </tr> <tr> <td>Adjustment to FY 1999/2000 Appropriated Value/ FY 2000 President's Budget:</td> <td style="text-align: right;">-1.220</td> <td></td> <td></td> </tr> <tr> <td>FY 2001 DON Budget Submit:</td> <td style="text-align: right;">6.194</td> <td style="text-align: right;">2.188</td> <td style="text-align: right;">0.595</td> </tr> </tbody> </table> <p style="margin-top: 20px;">(U) Funding: The total decrease of \$1.220M is the result of minor pricing adjustments and a \$0.479 midyear reduction..</p> <p>(U) Schedule: Not applicable.</p> <p>(U) Technical: Not applicable.</p> <p>C. (U) Other Program Funding Summary:</p> <table style="width: 100%; margin-top: 20px;"> <thead> <tr> <th></th> <th style="text-align: right;">FY 1998</th> <th style="text-align: right;">FY 1999</th> <th style="text-align: right;">FY 2000</th> <th style="text-align: right;">FY 2001</th> <th style="text-align: right;">FY 2002</th> <th style="text-align: right;">FY 2003</th> <th style="text-align: right;">FY 2004</th> <th style="text-align: right;">FY 2005</th> <th style="text-align: right;">to Complete</th> <th style="text-align: right;">Total Cost</th> </tr> </thead> <tbody> <tr> <td>267600/267606 (BA-2) Strategic Platform Support Equipment</td> <td style="text-align: right;">7.172</td> <td style="text-align: right;">12.499</td> <td style="text-align: right;">24.727</td> <td style="text-align: right;">15.356</td> <td style="text-align: right;">11.390</td> <td style="text-align: right;">20.235</td> <td style="text-align: right;">24.982</td> <td style="text-align: right;">12.683</td> <td style="text-align: right;">CONT.</td> <td style="text-align: right;">CONT.</td> </tr> <tr> <td>535500/5335506 (BA-4) Strategic Platform Support Equipment</td> <td style="text-align: right;">2.258</td> <td style="text-align: right;">2.942</td> <td style="text-align: right;">9.307</td> <td style="text-align: right;">2.901</td> <td style="text-align: right;">11.936</td> <td style="text-align: right;">8.468</td> <td style="text-align: right;">2.193</td> <td style="text-align: right;">4.634</td> <td style="text-align: right;">CONT.</td> <td style="text-align: right;">CONT.</td> </tr> </tbody> </table>									FY 1999	FY 2000	FY 2001	FY 2000 President's Budget:	7.414	2.200	0.600	Appropriated Value:	7.414			Adjustment to FY 1999/2000 Appropriated Value/ FY 2000 President's Budget:	-1.220			FY 2001 DON Budget Submit:	6.194	2.188	0.595		FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	to Complete	Total Cost	267600/267606 (BA-2) Strategic Platform Support Equipment	7.172	12.499	24.727	15.356	11.390	20.235	24.982	12.683	CONT.	CONT.	535500/5335506 (BA-4) Strategic Platform Support Equipment	2.258	2.942	9.307	2.901	11.936	8.468	2.193	4.634	CONT.	CONT.
	FY 1999	FY 2000	FY 2001																																																									
FY 2000 President's Budget:	7.414	2.200	0.600																																																									
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	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	to Complete	Total Cost																																																		
267600/267606 (BA-2) Strategic Platform Support Equipment	7.172	12.499	24.727	15.356	11.390	20.235	24.982	12.683	CONT.	CONT.																																																		
535500/5335506 (BA-4) Strategic Platform Support Equipment	2.258	2.942	9.307	2.901	11.936	8.468	2.193	4.634	CONT.	CONT.																																																		

R-1 SHOPPING LIST - Item No. 157-14 of 157-18

Exhibit R-2a, RDT&E Project Justification
(Exhibit R-2a)

UNCLASSIFIED

UNCLASSIFIED

R-1 SHOPPING LIST - Item No. 157-15 of 157-18

Exhibit R-2a, RDT&E Project Justification
(Exhibit R-2a)

UNCLASSIFIED

CLASSIFICATION:

UNCLASSIFIED

EXHIBIT R-2a, RDT&E Project Justification		DATE: February 2000
APPROPRIATION/BUDGET ACTIVITY RDT&E, N/BA-7	PROGRAM ELEMENT NAME AND NUMBER Strategic Sub & Wpns Sys Spt 0101221N	PROJECT NAME AND NUMBER TRIDENT Submarine System Improvement/S0004
Architecture Model Maint. & COTS Technology Refresh -	FY98 (2nd Qtr) – Program Inception FY00 – CONT. – COTS Supportability, Architecture Maintenance and COTS Management Processes	
Q6 to Q5 Translator -	FY98 (2nd Qtr) – Program Inception; Installation and Test; Certification/IOC	

R-1 SHOPPING LIST - Item No. 157-16 of 157-18

Exhibit R-2a, RDT&E Project Justification
(Exhibit R-2a)

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CLASSIFICATION:

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Exhibit R-3 Cost Analysis (page 1)								DATE: February 2000				
APPROPRIATION/BUDGET ACTIVITY			PROGRAM ELEMENT			PROJECT NAME AND NUMBER						
RDT&E, N/BA-7			Strategic Sub & Wpns Sys Spt 0101221N			TRIDENT Submarine System Improvement/S0004						
Cost Categories (Tailor to WBS, or System/Item Requirements)	Contract Method & Type	Performing Activity & Location	Total PY s Cost	FY 99 Cost	FY 99 Award Date	FY 00 Cost	FY 00 Award Date	FY 01 Cost	FY 01 Award Date	Cost to Complete	Total Cost	Target Value of Contract
Primary Hardware Development											0.000	
Ancillary Hardware Development											0.000	
Systems Engineering											0.000	
Design/Development Engineering	SS-CPIF	Raytheon, Portsmouth RI	2.600	3.310	12/98	0.000	N/A				5.910	5.910
Software Development	WR	NUWC, Newport RI	0.600	0.000	N/A	0.000	N/A				0.600	0.600
Design/Development Engineering	SS-CPFF	Lockhead Martin, Manassas VA	2.300	2.330	12/98	0.506	12/99				5.136	5.500
Design/Development Engineering	Various	Various	11.700	0.000	N/A	0.000	N/A				11.700	11.700
Licenses											0.000	
Tooling											0.000	
GFE											0.000	
Award Fees											0.000	
Subtotal Product Development			17.200	5.640		0.506		0.000		0.000	23.346	23.710
Remarks:												
Development Support Equipment											0.000	
Software Development											0.000	
Training Development											0.000	
Integrated Logistics Support											0.000	
Configuration Management											0.000	
Support and Management	Various	Various	0.020	0.000	N/A	0.177	N/A	0.005			0.202	0.202
Technical Data											0.000	
GFE											0.000	
Subtotal Support			0.020	0.000		0.177		0.005		0.000	0.202	0.202
Remarks: 0.646 includes 0.167 and 0.479.												

R-1 SHOPPING LIST - Item No. 157-17 of 157-18

Exhibit R-3, Project Cost Analysis
 (Exhibit R-3)
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Exhibit R-3 Cost Analysis (page 2)										DATE: February 2000		
APPROPRIATION/BUDGET ACTIVITY				PROGRAM ELEMENT			PROJECT NAME AND NUMBER					
RDT&E, N/BA-7				Strategic Sub & Wpns Sys Spt 0101221N			TRIDENT Submarine System Improvement/S0004					
Cost Categories (Tailor to WBS, or System/Item Requirements)	Contract Method & Type	Performing Activity & Location	Total PY s Cost	FY 99 Cost	FY 99 Award Date	FY 00 Cost	FY 00 Award Date	FY 01 Cost	FY 01 Award Date	Cost to Complete	Total Cost	Target Value of Contract
Developmental Test & Evaluation											0.000	
Test and Certification	WR	NUWC, Newport RI	0.300	0.554	10/98	1.505	10/99	0.590	10/00	CONT.	CONT.	CONT.
Test and Certification	Various	Various	0.700	0.000	N/A	0.000	N/A			0.000	0.700	0.700
Operational Test & Evaluation											0.000	
Tooling											0.000	
GFE											0.000	
Subtotal T&E			1.000	0.554		1.505		0.590		0.000	3.649	
<p>Remarks: After transition to Commercial Off-The-Shelf (COTS) based systems, obsolescence becomes a major issue. To keep current, it is necessary to support the development and maintenance of a RDT&E process to maintain TRIDENT subsystems using commercial technology and parts. This model will continue the evaluation and implementation of COTS Technology.</p>												
Contractor Engineering Support											0.000	
Government Engineering Support											0.000	
Program Management Support											0.000	
Travel											0.000	
Labor (Research Personnel)											0.000	
Overhead											0.000	
Subtotal Management			0.000	6.194		2.188		0.595		0.000	8.977	
<p>Remarks: Government Furnished Property – not applicable.</p>												
Total Cost			18.220	12.388		4.376		0.600		CONT.	CONT.	CONT.
Remarks:												

R-1 SHOPPING LIST - Item No. 157-18 of 157-18

Exhibit R-3, Project Cost Analysis
(Exhibit R-3)

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